Extra-Cranial Applications of Diffusion-Weighted MRI
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Edited by

Bachir Taouli
Mount Sinai School of Medicine, Department of Radiology, New York, USA
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Contributors

Andriy M. Babsky, PhD  
Department of Radiology, Indiana University, Indianapolis, Indiana, USA

Navin Bansal, PhD  
Department of Radiology, Indiana University, Indianapolis, Indiana, USA

Andrea Baur-Melnyk, MD  
Department of Clinical Radiology, University Hospitals – Grosshadern, LMU Ludwig Maximilian University of Munich, Munich, Germany

David J. Collins, PhD  
The Royal Marsden NHS Foundation Trust, Department of Radiology, Sutton, UK

Frederik De Keyzer, MSc  
University Hospitals Leuven, Department of Radiology, Leuven, Belgium

Nandita M. deSouza, MD, FRCR  
MRI Unit, Cancer Imaging Centre at the Institute of Cancer Research and Royal Marsden Hospital, Sutton, UK

Olaf Dietrich, PhD  
Josef Lissner Laboratory for Biomedical Imaging, Department of Clinical Radiology, University Hospitals – Grosshadern, LMU Ludwig Maximilian University of Munich, Munich, Germany

Yong Guo, MD  
Radiology Department, Navy General Hospital of the PLA, Beijing, China

Tomoaki Ichikawa, MD, PhD  
Department of Radiology, University of Yamanashi, Shimokato, Japan

Jens Jensen, PhD  
Department of Radiology, Physiology, and Neuroscience, New York University Langone Medical Center, New York, USA

Shenghong Ju  
Department of Radiology, Indiana University, Indianapolis, Indiana, USA

Sooah Kim, MD  
Department of Radiology, New York University Langone Medical Center, Department of Radiology, New York, USA

Dow-Mu Koh, MD  
The Royal Marsden NHS Foundation Trust, Department of Radiology, Sutton, UK

Thomas C. Kwee, MD, PhD  
University Medical Center Utrecht, Department of Radiology, Utrecht, The Netherlands

Masayuki Maeda, MD  
Department of Radiology, Mie University School of Medicine, Tsu, Japan

Utaroh Motosugi, MD, PhD  
Department of Radiology, University of Yamanashi, Shimokato, Japan

Ali Muhi, MD  
Department of Radiology, University of Yamanashi, Shimokato, Japan

Anwar R. Padhani, FRCP, FRCR  
Paul Strickland Scanner Centre, Mount Vernon Hospital, Northwood, UK

Sophie F. Riches, MPhys, MSc  
Cancer Imaging Centre at the Institute of Cancer Research and Royal Marsden Hospital, Sutton, UK
List of contributors

Katsuhiro Sano, MD, PhD
Assistant Professor, Department of Radiology, University of Yamanashi, Shimokato, Japan

Hela Sbano, MRCP, FRCR
Imperial College NHS Trust, Hammersmith Hospital, London, UK

Eric E. Sigmund, PhD
University Langone Medical Center, New York, USA

Taro Takahara, MD, PhD
Tokai University School of Engineering, Department of Biomedical Engineering, Japan and University Medical Center Utrecht, Department of Radiology, Utrecht, The Netherlands

Bachir Taouli, MD
Mount Sinai School of Medicine, Department of Radiology, New York, USA

Harriet C. Thoeny, MD
Department of Diagnostic, Interventional, and Pediatric Radiology, University of Bern, Bern, Switzerland
Preface

Powered by the tremendous advances in technology over the last few years, MR imaging has the potential to go beyond morphology and provide functional information on organs and tumors. One of the most promising techniques is diffusion-weighted MRI (DWI), which has been routine in brain imaging since the early nineties, and is now applied more and more often in body imaging. I developed an interest in DWI when I was a resident; I thought it was fascinating to provide a different “dimension” to morphology. In the last few years, diffusion image quality outside the brain has improved tremendously, as major vendors and many research groups have focused their interest on this technique. While certain clinical applications of DWI – such as tumor detection and characterization – are more or less established and adopted by many academic and non-academic centers, DWI is still in its infancy, and other applications such as diffuse liver and renal disease and tumor treatment response have to be established in larger confirmatory studies. I am pleased to serve as the editor of this book, compiling the most recent information on DWI applied to the body by world-renowned experts in the field. The text is divided by organ, thus making it more easily searchable, and will serve beginners as well as more advanced diffusion users. With this book, we hope to attract more researchers into body diffusion imaging, which has enormous potential particularly in oncology.

Bachir Taouli, MD
Department of Radiology,
Mount Sinai Medical School,
New York, USA